Active Cycle Breathing Technique (ACBT)

1. Huff x2
2. Breathing Control
3. Deep Breathing 3-4 Breaths
4. Breathing Control
5. Deep Breathing 3-4 Breaths
6. Breathing Control

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What is ACBT?

This is a technique to help you clear phlegm from your chest. Coughing alone can be tiring and unproductive. Active Cycle of Breathing uses different depths of breathing to move phlegm from the small airways at the bottom of your lungs to larger airways near the top where they can be cleared more easily with huffing/coughing.

Active Cycle of Breathing can be performed in sitting, lying or postural drainage positions. At first you should start in the sitting position.

Active Cycle of Breathing should only be carried out following demonstration and instruction by your physiotherapist.

General Rules

- Try to maintain a good breathing pattern with relaxed shoulders and neck
- Try to breathe in through your nose and out through your mouth. Breathing out should be slow, like “sighing out”. This minimises any wheezing

The cycle consists of:

Breathing Control (also called tummy breathing)

Breathing control is a part of the cycle to allow rest. It is advisable to practice this exercise when feeling relaxed and in control in order to use it effectively.

- Relax in a comfortable position, with your head, neck and arms well supported and shoulders dropped
- Rest one hand on your tummy, keeping shoulders and upper chest relaxed and allow your hand to rise gently as you breathe in. (If you imagine air filling your tummy like a balloon this may help)
- Sigh out gently through the mouth
- Ensure shoulders remain relaxed
- Over a few seconds, gradually increase depth of breathing while staying relaxed

Deep breathing exercises

This is an exercise to help you make better use of the lower parts of your lungs and loosen any phlegm.

- Relax in a comfortable position, with your head, neck and arms well supported and shoulders dropped
- Breathe out gently
- Try to make sure that your neck and shoulders stay relaxed
- Take a long deep breath in, slowly through your nose if comfortable, if not, through your mouth. At the end of the breath in, hold the air in for 2-3 seconds
- Let the air out gently through your mouth
- Repeat 3 - 4 times then rest

Forced expiration technique also known as Huff

Huffing, also known as the forced expiratory technique helps to remove phlegm better than coughing. It is less tiring than coughing.

- Take a half breath in
- With your mouth open squeeze the air forcefully out of your lungs, as though you are steaming up a mirror before wiping it clean. Your tummy muscles should tighten, but your throat muscles should stay relaxed. The huff must be long enough to move the phlegm up from smaller, deeper airways into the larger, higher airways. If it is too short it won’t be as effective
- Follow this with breathing control until you have your breath back
- Repeat
- As phlegm moves into larger breathing tubes take a deep breath in. Another huff or a cough will then clear them
A full cycle consists of:

1. Huff x2
2. Breathing Control
3. Deep Breathing 3-4 Breaths
4. Breathing Control
5. Deep Breathing 3-4 Breaths
6. Breathing Control

The number of times/breaths may vary depending on how breathless you are or on the amount of phlegm.

**When do I stop?**

Keep doing the cycle until you have done two cycles without clearing any phlegm OR until you are tired.

**How often should I do them?**

If you spit up phlegm every day then you will need to clear your lungs daily. Your physiotherapist will advise you on how many times a day you should be clearing your chest.

Use this method instead of just coughing when you feel that you have phlegm to clear from your chest.

If you cough up phlegm only occasionally then you may use the technique only when needed for example when you have a chest infection. If you have an infection you will need to do the cycle several times a day to clear the phlegm.

**Other things which may help?**

- If you use a bronchodilator/inhaler medication use it before you do your exercises
- Drink plenty of clear water
- Always clear your chest in the morning. A hot drink may help you if you wake feeling dry
- Clear your chest before you eat
- If your phlegm changes colour take a sample to your doctor
- If you have any questions about your chest condition contact your doctor, nurse or physiotherapist

**Contact number**

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